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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/800,549 03/15/2004 Thomas J. Ribarich IR-2459 (2-3924) 9792 7590 **EXAMINER** 03/24/2005 OSTROLENK, FABER, GERB & SOFFEN HAN, YOUNGHUIE JESSICA 1180 Avenue of the Americas ART UNIT PAPER NUMBER New York, NY 10036-8403 2838

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/800,549	RIBARICH ET AL.
	Examiner	Art Unit
	Y. J. Han	2838
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be tir ly within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	nely filed  s will be considered timely. the mailing date of this communication. (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on 3/15	/04.	
	 s action is non-final.	
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims	ı	
4)⊠ Claim(s) <u>1-23</u> is/are pending in the application.		
4a) Of the above claim(s) is/are withdrawn from consideration.		
5)⊠ Claim(s) <u>15-18</u> is/are allowed.		
6)⊠ Claim(s) 1-3,8,11,13,14 and 19-23 is/are rejected.		
7)⊠ Claim(s) <u>4-7,9,10 and 12</u> is/are objected to.		
8) Claim(s) are subject to restriction and/or election requirement.		
Application Papers		
9) The specification is objected to by the Examine	er.	
10)⊠ The drawing(s) filed on <u>15 March 2004</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).		
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).		
a) All b) Some * c) None of:		
1. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
3. Copies of the certified copies of the priority documents have been received in this National Stage		
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.		
See the attached detailed emoc denoting a list of the certified copies not received.		
Attachment(s)		
1) Notice of References Cited (PTO-892)	4) 🔲 Interview Summary	(PTO-413)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Motice of Informal F	Patent Application (PTO-152)

#### **DETAILED ACTION**

#### **Drawings**

1. Figure 5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-3, 11, 13, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Albrecht et al (5,654,881).

Albrecht et al discloses a power converter for delivering power to a load, comprising: a single stage buck-boost converter (10) for converting a rectified input signal; a switching output stage (10b) for converting the DC signal to a switched signal delivered to the load; and a controller (22) coupled to the buck-boost converter and the output stage for controlling the buck-boost converter and the output stage; wherein the buck-boost converter includes a switch (18-1,18-2) driven by the controller; drive signals (G1, G2) provided from the controller to the

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switch, the drive signals being operable to switch the switch to draw an input current substantially in phase (see figure 2) with an input voltage; a feedback signal (22a) from the buck-boost converter to the controller for contributing to determining when the switched is switched. "For power factor correction applications, this push-pull converter, by transitioning between the Boost and Buck operating modes, is able to shape the input current."

### Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 6. Claims 8, 14, and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albrecht et al (5.654,881) in view of the acknowledged prior art.

Albrecht et al discloses the invention substantially as claimed but does not disclose a switching full-bridge, an HID lamp, an integrated circuit, and a power factor correction circuit.

The acknowledged prior art clearly teaches that use of such features is well known in the art (see Background of the Invention section and figure 5 which show all features). Therefore, it would have been obvious to one having ordinary skill in the art to employ such features in Albrecht et al, as taught by the acknowledged prior art, to obtain the claimed invention for the purpose of attaining a high efficiency.

## Allowable Subject Matter

- 7. Claims 15-18 are allowed.
- 8. Claims 4-7, 9, 10, and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 9. The following is an examiner's statement of reasons for allowance:

Claim 15 recites, inter alia, a diode coupled to the switch and the inductor for directing current from the switch to the inductor when the diode is not conducting; and a capacitor coupled to the diode and the inductor for storing energy supplied by the inductor when the diode is conducting, the capacitor supplying an output of the buck-boost converter.

The art of record does not disclose the above limitations, nor would it be obvious to modify the art of record so as to include either of the above limitations.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y. J. Han whose telephone number is 571-272-2078. The examiner can normally be reached on Mon-Fri 5:30am-2:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 571-272-2084. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

J. Han

Primary Examiner Art Unit 2838